



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, Maryland 20910

September 3, 1998

MEMORANDUM FOR: Seafood Inspection Program Personnel

FROM: Richard V. Cano *Richard V. Cano*
Deputy Director
Seafood Inspection Program

SUBJECT: Inspection of Products Subjected to a Process
Involving Carbon Monoxide Gas

The purpose of this Memorandum is to clarify the position of the NOAA Seafood Inspection Program (NSIP) relative to the inspection of products that have been subjected to a process involving carbon monoxide (CO) gas.

During the past few years, there has been an apparent increase in the practice of applying CO to tuna products such as steaks or sashimi cuts to enhance the color of the product. The U.S. Food and Drug Administration considers the product which has been subjected to such a process to be adulterated under the provisions Sec. 402 (b) of the Federal Food, Drug, and Cosmetic Act in that damage or inferiority has been concealed, and/or that a substance has been added to make it appear better or of greater value than it is. It has been the policy of the NOAA Seafood Inspection Program not to lot inspect, apply marks, or certify such product.

In 1997, NOAA became aware of a process which employed what the company termed "tasteless smoke". The purpose of its application was to retard the development of the brown color that rapidly occurs in tuna flesh after it has been cut. Although CO was a component of the "tasteless smoke" gas, it was at a concentration similar to that in normal smoke. Unlike other processes that result in the color of the



product being enhanced or brightened and fixed through the use of higher concentrations of CO, this process did not enhance the natural color and the color of the flesh degraded over time. At the request of the importer, Hawaii International Seafood, Inc. (HIS), NOAA performed verification inspections in overseas plants that were using the "tasteless smoke" process. Subsequent to these verification audits, HIS provided data to FDA through correspondence and meetings to support the acceptability of its process. This resulted in the following policy statement which I distributed by E-mail on October 7, 1997:

Based on the outcome of a meeting that was recently held between representatives of Hawaii International Seafood, Inc. and the FDA Office of Seafood (OS), as well as my subsequent conversations with Mr. Philip Spiller and Dr. Anthony Brunetti of FDA-OS, we will re-institute offering inspection services for product that has been treated with "tasteless smoke". It is my understanding that the firm will be submitting additional data to FDA to further support the acceptability of the process and product, and that FDA will not take action against such product unless there is evidence of adulteration. In the event that our inspection of this product reveals that the process has been manipulated to result in adulteration of the product, the Regional Inspection office will communicate these findings to the firm that requested the inspection. Depending on the response, referral to the appropriate FDA District Office may be made in accordance with our normal procedures.

It has come to our attention that considerable amounts of frozen tuna, usually in the form of steaks, are being imported from sources that utilize CO to enhance and fix the color of the flesh. Therefore, to further clarify the policy above, any frozen tuna products that do not have the expected reddish-brown to brown color, should be suspected of having been treated with carbon monoxide or another agent. The inspector should first determine if such an agent has been declared on the label and record this information. Many firms are using statements such as "tasteless smoke" which was first coined by Hawaii International as part of their accepted method, but has been "borrowed" by others that have not followed the same acceptance

procedure. Other terms include "red tuna steaks", "lightly smoked", or even "CO added". Even though this information is on the label, it does not make it legal. To date, there are only four facilities which have demonstrated that they are treating tuna through a process having CO as a component of the gas which has been generated from smoke. These firms are:

	<u>Verification Date</u>
1. Pt. Intimas Surya Bali, Indonesia	January 1998
2. Pt. Intimas Surya Maldives	January 1998
3. Pohnpei Fisheries Corporation Pohnpei, Micronesia	October 1997
4. Evergreen Enterprises General Santos City, Philippines	January 1998

This means that in order to lot inspect the product, the party requesting the inspection must be able to provide information as to where this product was processed through the presentation of an invoice or a Certificate of Conformance. If this information cannot be provided, we will not inspect the product.

There have been additional producers of treated product that have requested that we audit the processing of these products in their facilities overseas, and to subsequently lot inspect the product from these facilities. We are currently making arrangements to conduct verification inspections of these firms and processes for compliance with applicable U.S. laws and regulations. Following these inspections and after appropriate discussions with FDA, which may require the firm to submit a petition and additional data on its process, other acceptable firms and processes may be added through revisions of this policy.

If you have any further questions on the matter, please feel free to contact the Silver Spring office.